



# South Coast Air Quality Management District

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**FAXED: JUNE 1, 2006**

June 1, 2006

Mr. Brian Foote  
City of San Bernardino,  
Development Services Department,  
300 North "D" Street,  
San Bernardino, CA 92418

Dear Mr. Foote:

**Initial Study for the  
Waterman Business Park (TTM No. 17972)  
Development Permit Type 2 No. 05-08**

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document.

SCAQMD staff is concerned that by lowering the assumptions for the URBEMIS 2002 model run, the Lead Agency has not fully accounted for all the proposed project's air quality impacts. SCAQMD staff recommends that the project's emissions be revised to accurately reflect the proposed project's full air quality impacts. Further, given that the proposed project, a light-industrial facility, will generate some amount of truck traffic, SCAQMD believes that a Health Risk Assessment is warranted to determine the cancer risk, if any, that emissions from the truck traffic will pose to the workers.

Please find additional comments regarding the proposed project. The SCAQMD is available to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Charles Blankson, Ph.D., Air Quality Specialist – CEQA Section, at (909) 396-3304 if you have any questions regarding these comments.

Sincerely

Susan Nakamura  
Planning & Rules Manager,  
Toxics Rulemaking and CEQA Analysis

Attachment  
SN: CB  
SBC060510-02  
Control Number

**Initial Study (IS) for the Waterman Business Park  
TTM No. 17971 & Development Permit Type 2 No. 05-08**

1. **Project Air Quality Emissions:** There are discrepancies in the air quality analysis which may lead to inaccurate projected emissions from the proposed project. For example, page 1 of the Air Quality Analysis states that though the proposed business park will be constructed in three phases, the entire site (30 acres) will be graded all at once. Grading 30 acres @ 26.4 pounds of PM<sub>10</sub> per acre per day will generate approximately 792 pounds of PM<sub>10</sub> for the project. Even with full mitigation, grading 30 acres @ ten pounds of PM<sub>10</sub> per acre per day will generate 300 pounds of PM<sub>10</sub>. 300 pounds of PM<sub>10</sub> far exceeds the significance threshold of 150 pounds per day for PM<sub>10</sub>. Secondly, the URBEMIS model output printout shows total acres to be developed as 12.28 acres which is much less than the 30 acre proposed project size. Thirdly, the grading equipment also shows only two rubber-tired dozers and two tractor/loader/backhoes. These are inadequate for a 30 acre project being graded for that period of time. For these reasons, SCAQMD staff believes the emissions presented in the mitigated negative declaration underestimate the proposed project's emissions. Please correct these discrepancies so as to accurately reflect the proposed project's full air quality impacts in the final environmental document.
2. **Localized Significance Thresholds:** Given the above considerations SCAQMD staff believes that the proposed project has the potential to also result in localized emissions impacts. Consistent with the SCAQMD's environmental justice program and policies, the SCAQMD recommends that lead agency also evaluate localized air quality impacts. SCAQMD staff recommends that the lead agency undertake the localized analysis to ensure that all necessary and feasible mitigation measures are implemented should the analysis demonstrate that construction NO<sub>x</sub>, CO and PM<sub>10</sub> emissions are significant. The methodology for conducting the localized significance thresholds analysis can be found on the SCAQMD website at:  
[www.aqmd.gov/ceqa/handbook/LST/LST.html](http://www.aqmd.gov/ceqa/handbook/LST/LST.html)
3. **Diesel Truck Emissions:** On page 43 of the Initial Study, it is stated that the proposed project at buildout will generate approximately 5,087 daily vehicle trips. Since about 75 percent of the proposed facilities will comprise light industrial uses, it is most likely that the proposed project will attract some amount of heavy-duty truck traffic. Table 2 on page 21 of the Traffic Impact Analysis (Revised) shows the breakdown per vehicle type of the proposed project's projected traffic. The lead agency does not provide the routes along which the trucks will be using to access and exit the facilities. Given that the California Air Resources Board (CARB) has designated diesel particulate as a carcinogen, the lead agency needs to demonstrate that the diesel emissions from these trucks will not exceed the cancer risk to sensitive receptors, SCAQMD recommends that the lead agency perform an air toxics health risk analysis of the diesel truck emissions for the proposed project. The SCAQMD has prepared guidance for preparing such an analysis which can also be accessed at the SCAQMD website:  
[www.aqmd.gov/ceqa/handbook/mobile\\_toxic/mobile\\_toxic.html](http://www.aqmd.gov/ceqa/handbook/mobile_toxic/mobile_toxic.html).

4. **Carbon Monoxide (CO) Hot-Spots:** Table 7 on page 37 in the Traffic Impact Analysis (TIA Revised) April 20, 2006, shows that eight out of eleven intersections near the project site will be operating at level of service D or worse during both the morning and afternoon peak hours at buildout in 2007 even with infrastructural improvements. Table 10 on page 40 of the TIA Revised shows that in 2030, even with improvements, seven of the eleven impacted intersections will be operating at level of service D. The SCAQMD recommends that if a level of service at any affected intersections deteriorates from C to D or if the proposed project increases the volume-to-capacity ratio of any intersections rated D or worse by two percent or more, then a CO hotspots analysis may be necessary. According to the tables cited above, SCAQMD staff believes that the volume-to-capacity ratios at six of the intersections would degrade by more than two percent points at buildout years 2007 and 2030. SCAQMD staff therefore recommends that a CO hotspots analysis be performed to determine whether or not CO hotspots would occur at those intersections and what actions need to be taken to reduce the impact.
5. **Mitigation Measures:** If construction or operational air quality impacts from the proposed project are concluded to be significant, the following measures are recommended for the lead agency to consider where applicable or feasible:
  - Maintain equipment and vehicle engines in good condition and in proper tune as per manufacturers' specifications.
  - Require the use of alternative clean fuel such as compressed natural gas-powered equipment with oxidation catalysts instead of gasoline- or diesel-powered engines. However, where diesel equipment has to be used because there are no practical alternatives, the construction contractor should use particulate filters, oxidation catalysts and low sulfur diesel as defined in SCAQMD Rule 431.2, i.e., diesel with sulfur content of 15 ppm by weight or less. The low-sulfur diesel has the potential to reduce NO<sub>x</sub> emissions by 50 percent.
  - Use aqueous or emulsified diesel fuel for all construction equipment. Aqueous diesel formulations have received interim verification by the CARB and show a reduction of 16% in NO<sub>x</sub> and 60% in PM<sub>10</sub> from diesel exhaust. Information of aqueous diesel formulations can be found at the following websites:  
[www.arb.ca.gov/fuels/ddiesel/altdiesel/altdiesel.html](http://www.arb.ca.gov/fuels/ddiesel/altdiesel/altdiesel.html),  
[www.lubrizol.co/PuriNox/markets\\_distributors.asp](http://www.lubrizol.co/PuriNox/markets_distributors.asp),  
[www.cleanfuelstech.com/Customers/Customers.htm](http://www.cleanfuelstech.com/Customers/Customers.htm).
  - Use electricity from power poles instead of from temporary diesel- or gasoline-powered generators.
  - Trucks hauling dirt, sand, gravel or soil are to be covered or should maintain at least two feet of freeboard in accordance with Section 23114 of the California Vehicle Code.
  - Pave parking areas and construction access roads to the main roads to avoid dirt being carried on to the roadway.
  - Restrict idling emissions by using auxiliary power units and electrification.
  - Enforce truck parking restrictions.
  - Restrict truck traffic on some routes.

- Provide a minimum of 300-meter buffer zone between truck traffic and sensitive receptors.
- Redirect truck route to avoid residential areas or schools.
- Improve traffic flow through signal synchronization.
- Provide electrical sources for service equipment and docking of trucks.
- Use light-colored roof materials to deflect heat.
- Install solar panels on roof to supply electricity for air conditioning.
- Use double-paned windows to reduce thermal loss.
- Install central water heating systems to reduce energy consumption, and
- Install energy-efficient appliances to reduce energy consumption.

Other mitigation measures for consideration by the lead agency can be found in Chapter 11 of the SCAQMD CEQA Handbook.